

# Town of Rockland

# Sewer Commission

Post Office Box 330 ROCKLAND, MASSACHUSETTS 02370

Tel: 781.878.1964 Fax: 781.878.1909 Charles Heshion, Chairmen Daniel E. Duross, Commissioner Keith Nastasia, Superintendent

September 15, 2021

USEPA – Water Division Justin Pimpare, Regional Pretreatment Coordinator 5 Post Office Square – Suite 100 (06-03) Boston, MA 02109-3912

Re:

Annual Report

Industrial Pretreatment Program

Rockland, MA

Dear Mr. Pimpare:

On behalf of the Town of Rockland, I am pleased to submit one [1] copy of the Annual Industrial Pretreatment Report summarizing activities for the year ending July 31, 2021.

I am the new Superintendent/IPP Coordinator effective May 3, 2021 and was assisted with this report by Suez who is the contract operator of the Rockland WWTP. I hope that this report meets all of your requirements.

If you should have any questions, please feel free to contact the undersigned at [781] 878-1964.

Very truly your

Keith Nastasia

Superintendent/IPP Coordinator

Rockland Sewer Department

Cc: J. Gould, MA DEP



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September 15, 2021

Massachusetts Department of Environmental Protection Bureau of Waste Prevention – Industrial Wastewater Section 1 Winter Street Boston, MA 02108

Re:

Annual Report

**Industrial Pretreatment Program** 

Rockland, MA

Dear Mr. Gould:

On behalf of the Town of Rockland, I am pleased to submit one [1] copy of the Annual Industrial Pretreatment Report summarizing activities for the year ending July 31, 2021.

I am the new Superintendent/IPP Coordinator effective May 3, 2021 and was assisted with this report by Suez who is the contract operator of the Rockland WWTP. I hope that this report meets all of your requirements.

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Very truly yours,

Keith Nastasia

Superintendent/IPP Coordinator

Rockland Sewer Department

Cc: J. Pimpare, EPA New England

# TOWN OF ROCKLAND INDUSTRIAL PRETREATMENT ANNUAL REPORT YEAR ENDING JULY 31, 2021

### PREPARED BY TOWN OF ROCKLAND AND SUEZ

# ROCKLAND WASTEWATER TREATMENT FACILITY - NPDES PERMIT #MA0101923

**SEPTEMBER 17, 2021** 

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# **EPA Region 1Annual Pretreatment Report Summary Sheet**

POTW Name: ROCKLAND WWTP	
NPDES Permit #: MA 0101923 Pretreatment Report Period Start Date:	08-01-2020
Pretreatment Report Period End Date:	07-31-2021
# of Significant Industrial Users (SIUs): # of SIUs Without Control Mechanisms:	0
# of SIUs not Inspected:	0
# of SIUs not Sampled:	0
# of SIUs in Significant Noncompliance ( with Pretreatment Standards:	(SNC) 0
# of SIUs in SNC with Reporting Requirements:	0
# of SIUs in SNC with Pretreatment Compliance Schedule:	0
# of SIUs in SNC Published in Newspape	er: 0
# of SIUs with Compliance Schedules:	0
# of Violation Notices Issued to SIUs:	0
# of Administrative Orders Issued to SIUs	s: 0
# of Civil Suits Filed Against SIUs:	0
# of Criminal Suits Filed Against SIUs:	0
# of Categorical Industrial Users (CIUs):	0
# of CIUs in SNC:	0

Penalties Total Dollar Amount of Penalties Colle	ected \$ 0
# of IUs from which Penalties have bee collected:	en 0
Local Limits Date of Most Recent Technical Evaluation of Local Limits:	March 2010
Date of Most Recent Adoption of Technically Based Local Limits:	March 2010

Pollutant	Limit (mg/L)	MAHL (lb/day)
Arsenic (total)	1.365	0.36
Cadmium (total) .	0.043	0.01
Chromium (total)	2.77	0.74
Copper (total)	0.793	0.21
Lead (total)	0.690	0.18
Mercury (total)	0.101	0.03
Nickel (total)	2.231	0.60
Silver(total)	0.299	0.08
Zinc (total)	2.61	0.70
Cyanide (total)	0.444	0.12
Total Toxic Organics (TTO)	2.13	0.57
Toxic Organics (TO) (single parameter)	1.00	0.27
Pesticides & PCB's	ND	ND
Oil & Grease (animal & vegetable)	100	27
COD	228	61
Total Kjeldahl Nitrogen	85	23
Phosphorus (total)	10	3
BOD	225	60
TSS	266	71
Ammonia (as N)	31	8

# NPDES PERMIT REQUIREMENT FOR INDUSTRIAL PRETREATMENT ANNUAL REPORT

The information described below shall be included in the pretreatment

An updated list of all industrial users by category, as set forth in 40 C.F.R. 403.8(f)(2)(i), indicating compliance or noncompliance with the following:

baseline monitoring reporting requirements for newly promulgated industries

- compliance status reporting requirements for newly promulgated industries
- periodic (semi-annual) monitoring reporting requirements, categorical standards, and

local limits;

A summary of compliance and enforcement activities during 2. the preceding year, including the number of:

significant industrial users inspected by POTW (include

inspection dates for each industrial user),

significant industrial users sampled by POTW (include sampling dates for each industrial user),

compliance schedules issued (include list of subject

written notices of violations issued (include list of subject users),

administrative orders issued (include list of subject users),

- criminal or civil suits filed (include list of subject
- penalties obtained (include list of subject users penalty amounts);
- 3. A list of significantly violating industries required to be published in a local newspaper in accordance with 40 C.F.R.
- A narrative description of program effectiveness including 4. present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority;
- A summary of all pollutant analytical results for influent, 5. effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for the Wastewater Treatment System and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this Permit.

At a minimum, annual sampling and analysis of the influent and effluent of the Wastewater Treatment Plant shall be conducted for the following pollutants:

b.) c.) d.)	Total Total Total	Cadmium Chromium Copper Lead	g.) h.) i.)	Total Total Total	Cyanide
e.)	Total	Mercury	i.)	Total	Arsenia

The sampling program shall consist of one 24-hour flow-proportioned composite and at least one grab sample that is representative of the flows received by the POTW. The composite shall consist of hourly flow-proportioned grab samples taken over a 24-hour period if the sample is collected manually or shall consist of a minimum of 48 samples collected at 30 minute intervals if an automated sampler is used. Cyanide shall be taken as a grab sample during the same period as the composite sample. Sampling and preservation shall be consistent with 40 CFR Part 136.

- 6. A detailed description of all interference and pass-through that occurred during the past year;
- 7. A thorough description of all investigations into interference and pass-through during the past year;
- 8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies;
- 9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users; and,
- 10. The date of the latest adoption of local limits and an indication as to whether or not the permittee is under a State or Federal compliance schedule that includes steps to be taken to revise

- (1) the quantity and quality of effluent introduced into the POTW; and
- (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

## **B.1.** Limitations for Industrial Users:

- a. Pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.
- b. The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

Within (90 <u>days of the effective date of this permit)</u>, the permittee shall prepare and submit a written technical evaluation to the EPA analyzing the need to revise local limits. As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee shall complete and submit the attached form (Attachment B) with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 120 days of notification by EPA and submit the revisions to EPA for approval.

The Permittee shall carry out the local limits revisions in accordance with EPA's <u>Local Limit Development Guidance</u> (July 2004).

# B.2. Industrial Pretreatment Program

- a. The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, 40 CFR 403. At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):
  - 1. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.
  - 2. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
  - 3. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.
  - 4. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
- b. The permittee shall provide the EPA (and the MassDEP) with an annual report describing the permittee's pretreatment program activities for the twelve month period ending 60 days prior to the due date in accordance with 403.12(i). The annual report shall be consistent with the format described in Attachment C of this permit and shall be submitted no later than October 1 of each year.
- c. The permittee must obtain approval from EPA prior to making any significant changes to the industrial pretreatment program in accordance with 40 CFR 403.18(c).
- d. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the Federal Regulations at 40 CFR 405 et. seq.

e. The permittee must modify its pretreatment program to conform to all changes in the Federal Regulations that pertain to the implementation and enforcement of the industrial pretreatment program.

The permittee must provide EPA, in writing, within 180 days of this permit's effective date proposed changes, if applicable, to the permittee's pretreatment program deemed necessary to assure conformity with current Federal Regulations.

At a minimum, the permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee will implement these proposed changes pending EPA Region I's approval under 40 CFR 403.18. This submission is separate and distinct from any local limits analysis submission described in the permit.

## B.3. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

# B.4. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of

# C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfall 001. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

# 1. UPDATED LIST OF SIU'S BY CATEGORY AS SET FORTH IN 40 CFR 403.8[f] [2] [i].

There are no Significant Industrial User's [SIU's] in the Town of Rockland.

### 2. COMPLIANCE AND ENFORCEMENT

Jay Pimpare of the Environmental Protection Agency (EPA) last conducted an audit for the Town of Rockland's Industrial Pretreatment Program on October 26, 2011. The purpose of this audit, much like that of a PCI, was to determine if:

- Program requirements were properly implemented and enforced
- Appropriate compliance determinations are being made and follow-up enforcement action is being initiated; and
- Previously approved program requirements have been adopted and are being implemented

The Town's Industrial Pretreatment Program was reviewed to identify areas, which may need adjustments. Specific requirements and recommendations were made as a follow-up to the audit with respect to the Town's implementation of its IPP program. A revised Sewer Use Ordinance was approved by the EPA and found it to be consistent with the 40 CFR 403 regulations.

Compliance and enforcement activities consist of a minimum of one annual inspection. Annual inspections were conducted at all IU's and commercial facilities during the past year to verify their discharge status, confirm that no unauthorized process wastewater flows have occurred since their last inspection and adhere to any new inspection recommendations provided by the EPA audit.

# The following inspections & sampling were carried out at other IU's:

7/01/21 6/10/21 6/30/23	bi-annual permit issued self-monitoring sampling permit expires
6/01/20 5/31/22	new bi-annual permit issued permit expires
	6/10/21 6/30/23 6/01/20

### ITW - Polymer Sealants North America

6/01/20 new bi-annual permit issued 5/31/22 permit expires

**ElectroSwitch** 

6/01/20 new bi-annual permit issued 5/31/22

permit expires

**MIJA** 

6/01/20 new bi-annual permit issued

5/31/22 permit expires

**South Shore Medical Center** 

07/01/21 new bi-annual permit issued

06/30/23 permit expires

**Battelle Labs** 

07/01/20 new bi-annual permit issued

06/30/22 permit expires

No sampling of 3M, ITW- Polymer Sealants North America, Electroswitch and MIJA was performed since all companies are controlled by Zero Discharge Permits on their process wastewater. WearGuard, South Shore Medical Center and Battelle Labs followed their permit with their sampling protocol.

### PRETREATMENT COMPLIANCE

The Town Of Rockland is fully implementing and enforcing its federally approved Industrial Pretreatment Program in accordance with the Town's NPDES permit and the General Pretreatment Regulations found at Title 40 of the Code of Federal Regulations ("CFR") Part 403.

For this reporting period, Wear Guard met all of its local limits. Given that the Town Of Rockland does not have a technically based concentration local limit for BOD it was stated in a previous letter from the EPA Regional Pretreatment Coordinator that the Town of Rockland should not be calculating industrial user significant non-compliance based on a surcharge limit.

# FOR CIU'S

No Notice of violation [NOV's] were issued

No Administrative Orders were issued

No Criminal or Civil Suits were filed

No Fines were levied

3. PUBLIC NOTIFICATION OF SIGNIFICANT NON-COMPLIANCE [SNC] FOR IU's

### **NOTE:**

There were no industries in SNC for the August 1, 2020 – July 31, 2021

Pretreatment Year.

In accordance with the United States Environmental Protection Agency regulations, 40 CFR 403.8 [f] [2] [vii] and the Town of Rockland Sewer Use Ordinance, the Town is required to publish annually, at a minimum, a list of all companies that are or have been in significant noncompliance [SNC] with federal, state, or local wastewater discharge pretreatment standards or other pretreatment requirements during a twelve [12] month period.

Companies in SNC during the Pretreatment Year [August 1, 2020-July 31, 2021: None

Respectfully submitted by:

Keith Nastasia

Superintendent/IPP Coordinator

Rockland Sewer Department

September 15, 2021

# 4. ROCKLAND INDUSTRIAL PRETREATMENT PROGRAM DESCRIPTION, PROGRAM EFFECTIVENESS, PRESENT AND PROPOSED CHANGES

The Town of Rockland's Industrial Pretreatment Program [IPP] has attempted to maintain, improve and expand its effectiveness by establishing good communication with all of the IU's over the past program year. Industries are encouraged to follow guidelines in toxic-use reduction and pollution prevention that which allow for reliable mechanisms in tracking the activities of the IU's. Industries that possess "zero discharge" permits are required to submit semi-annual certification statements of zero discharge. These certifications act as affidavits from the IU that no process discharges have occurred during the previous six [6] months. In addition, these companies are inspected on an annual basis in order to verify their non-discharge status.

All IU's are evaluated for spill prevention procedures and slug control plans. During inspections, each of the industries had their plans reviewed for effectiveness. The IU's all appear to have adequate plans in place, including having emergency call lists as well as in-house spill containment equipment.

As a regulatory requirement, all new industrial or commercial users that moved into the town were required to file for an industrial wastewater discharge permit [IWDP]. In addition, existing users requesting a change in their discharge are required to file for an IWDP. Ultimately, the Rockland Sewer Commission bases a sewer tie-in connection and permission to discharge upon review by the IPP coordinator to determine if Federal, State, and Local requirements are being met and upon final approval.

EPA has promulgated pretreatment standards to reduce discharges of mercury from dental offices into publicly owned treatment works (POTWs). The Dental Office Category regulation is codified at 40 CFR Part 441.

Dental offices that place or remove amalgam must operate and maintain an amalgam separator and must not discharge scrap amalgam or use certain kinds of line cleaners. The effective date of the rule for new dental offices was July 14, 2017. There are currently four existing dental offices in Rockland that comply with the new regulations.

The IPP coordinator and the Rockland Sewer Commission with direct contact to the regulatory agencies are handling any specific issues above the local levels jointly. In the event that the IPP coordinator was unavailable for specific duties in town, the on-site staff has assumed the necessary duties and requirements.

The Rockland Sewer Department Superintendent/IPP coordinator carries out all daily functions, which include site inspections, investigations, sampling, reporting, record keeping and follow-up, and cost recovery. The on-site wastewater plant staff at the wastewater facility provides additional assistance as needed.

A grease trap surveillance and inspection program is ongoing. Each facility is required to establish a written log that includes a continuous record of all grease trap maintenance activities. To date there are now 24 establishments that are permitted for grease trap inspections. The Rockland Sewer Superintendent and or the staff investigate all issues and complaints concerning grease trap maintenance on an on-going basis.

The IPP effectiveness over the past reporting year has continually improved. In 2006, the Town of Rockland performed a sump pump amnesty program regarding illegal connections to the sewer collection system. In 2019, the Town Of Rockland contracted with AECOM and conducted a sump pump inspection survey at all homes in Rockland. In 2021, the Town Of Rockland contracted with AECOM and conducted an (SSES) Sewer System Evaluation Study for approximately 80% of the collection system.

On an ongoing basis all IU's inspected are surveyed in all areas of potential discharge to the sewer system and overall impact to the watershed region. Suggestions for reduction and elimination of discharges are made regularly as part of the IPP pollution prevention component. Education is a priority of the Rockland IPP. The facility will continue to distribute a variety of information at local events including any scheduled household hazardous waste collection events, and through the Rockland school system.

Work will continue in the following areas:

- Ongoing attendance to area IPP seminars
- Increase Public awareness
- Increase permits to IU's and Restaurants to offset the IPP costs

Future funding for the Rockland IPP continues to follow the cost recovery program. This will contribute to the continued management of the program. This cost recovery program consists of a listing of local industrial/commercial categories that incorporates permit, application, sampling, and inspection fees. A copy of the IU schedule and fees can be found at the end of this report.

## 5. SUMMARY OF POLLUTANT ANALYTICAL RESULTS

This summary includes a comparison of influent sampling results versus threshold inhibitory concentrations for the Town of Rockland's Wastewater Treatment Facility and effluent sampling results versus water quality standards.

All additional influent, effluent, sludge, and full toxicity and bioassay data are available on the Discharge Monitoring Reports [DMR's] and special reports submitted monthly and per permit requirement by the Rockland Wastewater Treatment Facility and on file with the MADEP and the USEPA.

From June 1 thru June 3 2021, 24-hour flow proportioned composite influent and effluent samples & grab samples of the influent and effluent were collected at the Rockland WWTP, with consideration given to retention time through the plant. The samples were analyzed for Total Metals [arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc] and total cyanide grab sample with corresponding percent removals calculated. Additional analysis included volatile organics and semi-volatile organics for both the influent and effluent samples.

A copy of the analytical report for this sampling event is included with this report.

# ROCKLAND WWTF INFLUENT/EFFLUENT MONITORING ALL DATA ARE IN MG/L

PARAMETER	INFLUENT [06/01/21, 7:25am- 06/02/21, 7:25am]	EFFLUENT [06/02/21, 7:30am- 06/03/21, 7:30am]	REMOVAL RATE
TOTAL ARSENIC	0.0006	0.0006	N/A
TOTAL CADMIUM	0.0002	< 0.0001	50.0%
TOTAL CHROMIUN	М 0.0006	0.0005	16.7%
TOTAL COPPER	0.020	0.003	85.0%
TOTAL LEAD	0.0019	< 0.0001	94.7%
TOTAL MERCURY	<0.0002	< 0.0002	N/A
TOTAL NICKEL	0.002	0.003	N/A
TOTAL SILVER	< 0.0001	< 0.0001	N/A
TOTAL ZINC	0.076	< 0.014	81.6%
TOTAL CYANIDE	< 0.010	<0.010	N/A

N/A – Not applicable indicates that the removal rate could not be determined due to the absence of finite concentration values for both the influent and effluent parameters

# INFLUENT SAMPLING RESULTS – JUNE 01-02, 2021 VERSUS

# THRESHOLD INHIBITORY CONCENTRATIONS FOR THE ROCKLAND WASTEWATER TREATMENT FACILITY (All data are in MG/L)

Pollutant	Raw Influent Composite	<u>Data<sup>l</sup></u> Grab	Activated Sludge Minimum Reported Inhibition Threshold <u>Level<sup>2</sup></u>	Nitrification Minimum Reported Inhibition Threshold <u>Level<sup>2</sup></u>
Arsenic	0.0006	0.0005	0.1	1.5
Cadmium	0.0002	0.0001	1	5.2
Chromium (T	0.0006	0.0007	1	0.25
Copper	0.020	0.017	1	0.05
Lead	0.0019	0.0018	0.1	0.5
Mercury	<0.0002	< 0.0002	0.1	NA
Nickel	0.002	0.002	1	0.25
Silver	<0.0001	< 0.0001	0.25	NA
Zinc	0.076	0.068	0.3	0.08
Cyanide		< 0.01	0.1	0.34

<sup>1</sup>Raw influent sampling consisted of one 24-hour flow-proportioned composite sample for metals, one grab sample for metals and one grab sample for cyanide. (See the attached reports). The total daily flow for the sampling period [06/01/21- 06/02/21] was 2.960 million gallons. The average daily flow for the 2020-2021 IPP reporting period was 2.569 million gallons.

<sup>2</sup>The activated sludge and nitrification inhibition threshold levels were obtained from Tables 3-2 and 3-4 of the EPA's Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program.

# EFFLUENT SAMPLING RESULTS – JUNE 02-03, 2021 VERSUS WATER QUALITY STANDARDS (All data is in MG/L)

Pollutant	Effluent I Composite		Freshwater Chronic	Aquatic Life <sup>2</sup> Acute	<u>Saltwater</u> <u>Chronic</u>	Aquatic Life <sup>2</sup> Acute
Arsenic	0.0006	0.0006	0.19	0.36	0.069	0.36
Cadmium	< 0.0001	<0.0001	0.0011*	0.0039*	0.0093	0.043
Chromium (T Chromium (he Chromium (tr	ex)	0.0006	NA 0.011 0.21*	NA 0.016 1.7*	NA 0.05 NA	NA 1.1 10.3
Copper	0.003	0.004	0.012*	0.018*	NA	0.0029
Lead	<0.0001	0.0001	0.0032*	0.082	0.0056	0.14
Mercury	< 0.0002	<0.0002	0.000012	0.0024	0.000025	0.0021
Nickel	0.003	0.003	0.16*	1.4*	0.0083	0.075
Silver	<0.0001	< 0.0001	0.00012	0.0041	NA	0.0023
Zinc	0.014	0.015	0.11*	0.12*	0.086	0.095
Cyanide		< 0.01	0.0052	0.022	NA	0.001

<sup>\*</sup>at 100 mg/l hardness as CaCO<sub>3</sub>

<sup>&</sup>lt;sup>1</sup>Effluent sampling consisted of one 24-hour flow-proportioned composite sample for metals, one grab sample for metals and one grab sample for cyanide. (See the attached analytical reports). The total daily flow for the sampling period [06/02/21 - 06/03/21] was 2.880 million gallons. The average daily flow for the 2020-2021 IPP reporting period was 2.569 million gallons

<sup>&</sup>lt;sup>2</sup>Water Quality Standards are the maximum allowable levels for protection of freshwater aquatic life and saltwater aquatic life and were obtained from Table 3-1 of the EPA's Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program.

# SAMPLING AND ANALYSIS RESULTS FOR BIOASSAYS

Quarterly bioassay test results indicated a problem during one of the quarters during this reporting period. The results obtained are summarized below:

4th Quarter 2020 - Full compliance for acute and chronic survival tests

1st Quarter 2021 - Full compliance for acute and chronic survival tests

2<sup>nd</sup> Quarter 2021 - Full compliance for acute and chronic survival tests

3rd Quarter 2021 - Non-compliance for acute and chronic survival tests

LC-50 = 70.4%CNOEC = 25 %

The effluent collected exhibited significant chronic survival and reproduction effects to the C dubia at test completion (7 days) and caused mortality to >25% of the test organisms. The facility did not exhibit any process control upsets or abnormalities during the course of this study. However, the average flow during the study was between 5.0 and 4.1 MGD and the facility is only designed for 2.5 MGD. The effluent was also sampled afterwards for priority pollutant metals and surfactants but the results showed no abnormalities.

### IN-HOUSE WASTEWATER TREATMENT FACILITY PROCESS CONTROL

The facility continues to evaluate in-plant process activities to determine if any wastewater plant operations are of significant impact on the French Stream in our facility wastewater discharge, as well as evaluate upstream conditions of the plant.

In July 2009, the facility switched to Ferric Chloride as a coagulant for phosphorus and copper removal. Thus far, this has proven to be very effective and the facility has met the 0.2 mg/L limit for total phosphorus since April 2010. Lime addition has also continued year-round for alkalinity and nitrification. An effluent polymer is added at the secondary process of the facility to reduce the total phosphorus and total suspended solids. In June of 2012, the effluent polymer was changed from a polyamine to a polydadmic along with reducing the dosage. Since this change, the facility has been compliant for Bio-Toxicity's except for the 1<sup>st</sup> Quarter of 2019, 2<sup>nd</sup> Quarter 2020 and 3<sup>rd</sup> Quarter 2021 which in all cases could be attributed to the high flows at the facility.

Since the new Digester mixing system (Vaughan chopper pump system) was installed in December 2013, the volatile reduction has steadily increased. In 2020, the volatile reduction increased from 59% to 62%.

The POTW is staffed 8 hours a day, 7 days a week. Operators walk through the plant and sample process waste streams at least once per shift. Any unusual observations are noted in the operations log. A sample is regularly obtained and stored for review. The lab staff will check samples noted as "unusual" for pH, color and odor. If the unusual waste stream persists or interferes with any aspect of the treatment system, the sample is further analyzed in-house and if necessary at a contract laboratory.

Treatment plant personnel check the 13 pumping stations located in the Town daily. In 2019, the Town of Rockland completed the installation of SCADA at all 13 pumping stations. Any unusual odor, back up or maintenance problem is reported immediately to the Plant Manager. Industries that discharge to the pump station in question are contacted to determine how their recent activities may be affecting the station. Industries that may be suspect in interfering with the pump station operation are subjected to unannounced inspections and sampling events if warranted.

In April of 2021, Wright-Pierce engineering services completed a Comprehensive Wastewater Treatment Plant Assessment and Evaluation report of the overall condition of the facility. The Town of Rockland has taken the report under advisement until a full CWMP is completed in 2022 under an Engineering Scope of Services contract that was recently awarded to Wright-Pierce.

The Town of Rockland was issued an Administrative Order Docket No. 06-33 effective September 28, 2006. The Order requires the Town Of Rockland to employ all necessary means to comply with Flow, BOD, and TSS limits contained in the NPDES Permit. In May 2007, the Town Of Rockland installed a new continuous monitoring total chlorine residual analyzer per the requirements of the NPDES permit.

The current NPDES permit to discharge expired on June 30, 2011. However, on August 26, 2021, the Town of Rockland received a new draft NPDES permit that is currently in the comment period at the time of this report.

### INTERFERENCE AND PASS-THROUGH

# 6 & 7. Description & investigation of interference and pass-through

Over the past year, there has been no known interference or pass-through to the Rockland wastewater treatment facility through the incoming sewage flow.

The Rockland IPP continues to evaluate IU's for their discharges to the sewer system. The IPP will continue to focus on a number of smaller companies over the next 12 months in order to evaluate any pollutant contributions to the collection system.

# 8. Monitoring, sewer inspections, and evaluations to detect interference and Pass-trough's

The Town of Rockland has contracted with National Water Main Company and New England Pipe Cleaning Company as part of an ongoing maintenance program to inspect, and camera the main sewer lines, manholes, and service connections. Also as part of a five year sewer rehabilitation study the Town of Rockland has implemented an aggressive Inflow and Infiltration plan to grout, reline, and seal the main sewer lines, manholes, and service connections that are located in the sewer collection system.

# 9. ACTIONS TAKEN TO REDUCE INCIDENTS OF SIGNIFICANT VIOLATIONS BY SIU's

Since July 25 2011, the Town of Rockland has had no Significant Industrial Users (SIU's).

However, the Rockland IPP has a response mechanism to confirm all correspondence received from any SIU. This response mechanism will prompt review of all submitted materials in a timely manner and assist the local coordinator in responding to discharge violations and late reporting.

In addition, NOV's (Notices of Violation's) are sent to all IU's that do not meet discharge standards and deadlines for report submissions.

The local IPP coordinator has also set up sampling schedules to assist the IU's where sampling is required and compliance schedules when reports and re-sampling events are required so that deadlines for reporting can be met. All violations are followed up with a response letter, and if necessary, a site visit to review the IU wastewater processes.

All reports and data received by the Rockland IPP coordinator are dated and reviewed upon receipt for possible violations and compliance issues.

### 10. STATUS OF LOCAL LIMITS

EPA confirmed receipt of the Proposed Modification to the Rockland IPP, reviewed, and approved the Town's revised local limits on December 7, 1999. No public comments were received during the 30-day comment period following the public notice in the December 15, 1999 issue of the Brockton Enterprise. The local limits were therefore approved without further notice on January 20, 2000 in a letter from USEPA.

The local limits were incorporated into the Town's pretreatment program at a posted and regularly scheduled sewer commission meeting held on August 23, 2000. These local limits were formally adopted and approved by the Rockland Board of Sewer Commissioners. The Technically Based Local Limits were resubmitted to the EPA with no changes in March of 2010 and are presently utilized in all new and revised permits.

The Rockland Board of Sewer Commissioners has considered in the past a Best Management Practices (BMP's) by ordinance or with individual wastewater discharge permits to implement local limits.

The Town of Rockland updated its Sewer Use Ordinance in October of 2010 and incorporated the local limits into the updated Sewer Use Ordinance. It was reviewed by the Town of Rockland's legal counsel department and passed Town Meeting voter approval in May 2011. On June 26, 2014, the Rockland Board of Sewer Commissions voted to reinstate the EPA approved local limits that were excluded in error from the May 2011 meeting.

### TOWN OF ROCKLAND, MASSACHUSETTS SEWER COMMISSION

# Effluent Limit Concentrations for Industrial and Commercial Users

Parameter	Units	Daily Limits	MAHL (lb/day)	Reference
Flow	GPD	32,000	•••	(A) & (B)
pH (range)	pH units	5.0 to 9.0		(B)
Temperature	°F	104		(B)
Oil and Grease (animal and vegetable)	mg/l	100	27	(B)
COD	mg/l	228	61	(D)
Flash point (closed cup)	°F	141 <sup>(1)</sup>		(C)
Total Kjeldahl nitrogen	mg/l	85	23	(B)
Phosphorous (Total)	mg/l	10	3	· (B)
Arsenic (Total)	mg/l	1.365	0.36	(D)
Cadmium (Total)	mg/l	0.043	0.01	(E)
Chromium (Total)	mg/l	2.77	0.74	(D)
Copper (Total)	mg/l	0.793	0.21	(D)
Lead (Total)	mg/l	.690	0.18	(D)
Nickel (Total)	mg/l	2.231	0.60	(D)
Mercury (Total)	mg/l	0.101	0.03	(D)
Silver (Total)	mg/l	0.299	0.08	(D)
Zinc (Total)	mg/l	2.61	0.70	(D)
Cyanide (Total)	mg/l	0.444 .	0.12	(D)
Pesticides & PCB's*	mg/l	ND	ND	(D)
Total Toxic Organics**	mg/L	2.13	0.57	(E)

In addition, any discharge of 'conventional pollutants' above the following limits will result in surcharges:

Constituent	Concentration (mg/L)	Pounds per Day
BOD	225	60
TSS	266	71
Ammonia (as N)	31	8

- 40 CFR 403.5 (c)(1) (A)
- Article V, Town of Rockland Sewer Regulation (B)
- (C) 40 CFR 403.5 (b)(6)
- (D) Based on Local Limits adopted by RSC 8/23/00.
- 40 CFR 433.1 (PSNS) Metal Finishing (E)

<sup>\*</sup> The Pesticides and PCB limitation applies to any single parameter concentration.

\*\* Any single parameter may not exceed 1.00 mg/L as measured by EPA Methods 608, 624, 625, not including Pesticides and PCB's.

# ROCKLAND INDUSTRIAL PRETREATMENT PROGRAM INDUSTRIAL/COMMERCIAL CLASSIFICATION CATEGORIES AND FEES

Revised: 1/2/2002

CATEGORY	DESCRIPTION	Biannual Permit Fee	Permit Application Fee	Inspection Fee	Sampling Fee if Applicable	Additional Reinspection Fee [per site visit]
1	SIU's & IU's subject to Federal EPA Categorical standards. [as defined in CFR]. Scheduled for inspections 2x/yr & self-monitoring 4x/yr	a) [lg] 3000 b) [sm] 1000	50 50	75 75	75 75	25 25
	Subject to federal regulations, but employ a closed loop process with zero discharge. Scheduled for inspection 1x/yr & self-monitoring 2x/yr	a) [lg] 1000 b) [sm] 500	50 50	75 75	n/a n/a	n/a n/a
2	Industries discharging toxic substances/prohibited pollutants, but who are not subject to Federal EPA Categorical Standards & to also include non-categorical IU's	a) 1000 b) 500 c) 250	50 50 50	75 75	75 50	25 25
3	Industries discharging or having the potential to discharge conventional [BOD, TSS, pH, Oil & Grease, fecal coliforms] pollutant loads in sufficient quantities to cause violations of NPDES permit limits & to also include non-categorical IU's	a) 1000 b) 500 c) 350 d) 250 e) 100	50 50 50 25 25	75 75 50 50	75 50 25 25	25 25 25 25
	Industries with sanitary or nontoxic discharges using solvents, toxic and or hazardous chemicals that could potentially be discharged to the sewer system.	a) 1000 b) 500 c) 250 d) 100	50 50 50 25	75 75 50 50	75 50 25 25	25 25 25 25 25
5	Industries discharging only sanitary wastes and/or nontoxic discharges	a) 250 b) 100 c) 50	50 25 25	50 50 25	· 50 25 25	25 25 25
6	Dry industries with no waste discharges to the sewers, using solvents, toxic and/or hazardous chemicals, but still discharging sanitary wastes	a) 1000 b) 500 c) 250 d) 100	50 50 50 25	75 75 50 50	75 50 25 25	25 25 25 25
7	Dry industries with no waste & no sanitary discharges to the sewers	a) 100 b) 50	50 25	50 25	0 0	
8	Restaurants, Bakeries and Donut Shops	a) 500 b) 250 c) 100	50 50 25	50 50 25	50 25 25	25 25 25
9	Medical facility which conducts any possible infectious waste related procedures	a) 1000 b) 500 e) 250 d) 100	50 50 50 50 25	50 50 50 25	75 50 25 25	25 25 25
10	Hauled waste - carriers that truck septage or other wastewater to the POTW and discharge directly into the onsite holding tank	a) 200 b) 100 c) 50	25 25 25	n/a n/a n/a	25 25 25	n/a n/a n/a

# SPECIFIC MONITORING REQUIREMENTS FOR WEARGUARD CORPORATION

Beginning on the effective date of the permit, the permittee shall monitor from Outfall #1 the following parameters, at the indicated frequency:

Sample Parameter [Units]	Measurement Location	Frequency	Sample Type
Total Toxic Organics [TTO]	See note <sup>1</sup>	Semi-annually 2 <sup>nd</sup> & 4 <sup>th</sup> Qtr.	Grab/Composite <sup>2&amp;3</sup>
Aluminum, Total [mg/l]	See note <sup>1</sup>	Semi-annually 2 <sup>nd</sup> & 4 <sup>th</sup> Qtr.	Composite <sup>2&amp;3</sup>
Copper, Total [mg/l]	See note <sup>1</sup>	Semi-annually 2 <sup>nd</sup> & 4 <sup>th</sup>	Composite <sup>2&amp;3</sup>
Cadmium, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Chromium, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Lead, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Nickel, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Mercury, Total [mg/l]	See note 1	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Silver, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Zinc, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Cyanide, Total [mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>
Total Suspended Solids [TSS][mg/l]	See note <sup>1</sup>	Semi-annually 2 <sup>nd</sup> & 4 <sup>th</sup> Qtr.	Composite <sup>2&amp;3</sup>
Biochemical Oxygen Demand [BOD][mg/l]	See note <sup>1</sup>	Semi-annually 2 <sup>nd</sup> & 4 <sup>th</sup> Qtr.	Composite <sup>2&amp;3</sup>
Chemical Oxygen Demand [COD][mg/l]	See note <sup>1</sup>	Annually – 4 <sup>th</sup> quarter	Composite <sup>2&amp;3</sup>

### Notes:

1 Monitoring shall be from process discharge

Definitions of sample types. The type of composite sample [time or flow proportioned] and the sampling duration [i.e., 8-hour, 12-hour, and 24-hour] that is most appropriate for the industrial user shall be defined in the analytical report. For batch processes, the sample should be a composite of the batch discharges for the production day.

All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit

# Aramark / Wear Guard

### Wastewater Analysis Data from 8/1/05 through 6/30/21

Initial Permit issued: 5/1/01 New Permit issued: 7/1/21

												POLLUTA	ANT PAR	AMETERS	[Daily Max	imum / N	Ionthly A	verage lin	nit1 ma/L		
Monitoring	Date	Sampled	pH [s.u.]	Total	Oil	TSS	BOD	COD	Aluminum	Total	Total	Total	Total	Total	Total	Total	Total	Total		Total Toxic	No. of
Period		Ву	[5.0-9.0 su]	Flow	8	350	300			Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Cyanide		Org -Single	
		,	max/min		Grease	Day	Day	Report	Report	[0.043/	[2.77]	[0.793/	[0.69/	[0.101/	[2.231/	[0.299/	[2.61/	[0.444/	[2.13/	1.0 max	Violatoris
				Gal	mg/L	mg/L	mg/L		mg/L	0.043]	1.71)	0.793]		0.101	2.231]	0.24)	1.48]	0.444)		1.0 max	
Jul 05-Dec 05	8/24/2005	WG	6.60	115,309		242	49.2	- Ingre	Hight	0.045	1.71)	0.735	0.43]	0.101	2.231	0.24	1.40]	0.444)	n/a]		
	11/2/2005	WG	6.70	110,000		363			2						<u> </u>						0
	1/12/2006	WG	7.37			363	1450											<del> </del>			2
								3900		0.005	0.01		0.010	0.0002	0,025	0.01	0.050	0.005			0
	1/24/2006	WG	6.87			300	550		0.14			0.01							6,39	5.4	3
Jan 06-Jun 06		WG			31	<del>                                     </del>															0
	7/20/2006	WG	7,89	168,278		360	1300		0.10			0.02							1.35	0.57	2
Jul 06- Dec 06		WG	6.30	135,447		580	1100		0,10	0,005	0.01	0.014	0.010	0.0002	0.025	0.007	0.060		ND	ND	2
Jan 07-Jun 07	6/12/2007	WG	6.92	122,065		270	980		0.10			0.025							0.38	0.38	11
Jul 07- Dec 07	7/10/2007	WG Repeat		169,351	19														-		0
	8/14/2007	Sampling Repeat				170															0
	8/21/2007	Sampling Repeat					1700														1
	9/11/2007	Sampling					1100			-											1
	10/9/2007	Repeat Sampling				230	880		3												1
	11/7/2007	Repeat Sampling				160	1600														1
	12/13/2007	WG	5.96 / 7.00			210	1200	5400	0.10	0.005	0.01	0.01	0.010	0.0002	0.025	0.007	0.050	0.006	0.48	0.48	1
Jan 08-Jun 08	1/10/2008	WG					1100												1.641	0.62	1
	2/4/2008	Repeat Sampling					1000														1
	3/3/2008	Repeat Sampling					860														1
-	4/7/2008	Repeat Sampling					1200		- 1												
1	5/5/2008	Repeat Sampling		"			5400														1
	6/30/2008	WG	6.80	440.400		000															1
L. L. 22 D 22			6,89	118,196		200	1300		0.10			0.02							1.08	0.77	11
July 08-Dec 08	7/18/2008	WG Repeat			16																1
	8/4/2008	Sampling Repeat	-				1800														11
	9/8/2008	Sampling		-			1200														1
	12/9/2008	WG	5,54	110,569		110	760	4800	0.10	0.005	0.01	0.013	0.010	0.0002	0.025	0.007	0.050	0.005	ND	ND	1
Jan 09-Jun 09	6/23/2009	WG	6.68	112,567	12	260	590		0.10			0.016							0.42	0.42	0
July 09-Dec 09	12/10/2010	WG	6,68	86,204		130	600	3100	0.10	0.005	0.01	0.010	0.010	0,001	0.025	0.007	0.050	0.009	ND	ND	0
Jan 10-Jun10	6/17/2010	WG	5,91	63,588		66	1400		ND			0.076							0,44	0,44	1
July 10-Dec 10	12/7/2010	WG	5.95	66,871		68	180	1200	0.10	0,005	0.01	0.020	0.010	0.0004	0.025	0.007	0.050	0.007	0.18	80.0	0
Jan 11-Jun 11	6/9/2011	WG	6.18	50,789		130	160		0.10			0.100							0.11	0.11	0
July 11-Dec 11	12/13/2011	WG	6.68	18,792		95	80	2000	1.0	0.05	0.10	0.100	0.100	0.0002	0.25	0.07	0.50	0,005	0.065	0.065	0
Jan 12-Jun 12	6/7 <i>1</i> 2012	WG	6.69	10,030		460	230		0.10			0.039							ND	ND	0
July 12-Dec 12	12/4/2012	WG	6.58	44,299		60	94	600	0.10	0.005	0.01	0.021	0.01	0.0002	0.025	0.007	0.050	0.005	0.077	0.07	0
Jan 13-Jun 13	6/25/2013	WG		40,793		120	180		0.10			0.014							0.22	0.02	0
July 13-Dec 13	12/17/2013	WG	7.26	49,619		65	140	890	0.10	0.005	0.01	0.023	0.01	0.0002	0.025	0.007	0.050	0.006	0.0291	0.011	0
Jan 14-Jun 14	6/24/2014	WG	6.93	38,395	]	180	510		0.10			0.039							0.073	0.061	1
July 14-Dec 14	12/16/2014	WG	6.61	45,056	T	92	250	900	0.10	0.005	0.01	0.024	0.01	0.0002	0.025	0.007	0.050	0.005	ND	ND	0
		WG	6.62	30,985	4	170	680		0.10			0.030					000	5.000	0.2596	0.14	
		Repeat Sampling					140					5.550							0.2380	0,14	1
July 15-Dec 15		WG	6.94	38,315		86	260	590	0.10	0.005	0.04	0.000	0.04	0.000	0.005				-		0
16-Jun 16		WG						290		0.005	0.01	0.026	0.01	0,0002	0.025	0.007	0.050	0.005	0.006	0.017	0
			6.40	26,940		100	230	-	0.10			0.038							ND	ND	0
16-Dec 16	12/6/2016	WG Repeat	6.45	77,436		200	490	2700	0.10	0.005	0.01	0.026	0.01	0.0002	0.025	0.007	0.050	0.005	ND	ND	_1
Jan 17-Jun 17		Sampling		-+			114	-													0
Jan 17-Jun 17		WG Repeat	6.81	75,630	4	150	520		0.10			0.043							ND	ND	1
Jan 17-Jun 17	7/18/2017	Sampling					660														11
July 17-Dec 17	12/6/2017	WG	6.45	71,891		200	490	2700	0.10	0.005	0.01	0.026	0.01	0.0002	0.025	0.007	0,05	0.005	ND	ND	1

				<b></b>	,							POLLUTA	NT PARAI	METERS [C	aily Maxin	num / Mor	nthly Aver	age limit)	mg/L		
Monitoring	Date	Sampled	pH (s.u.)	Total	Oil	TSS	BOD	COD	Aluminum	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total Toxic	Total Toxic	No. o
Period		Ву	[5.0-9.0 su]	Flow	&	350	300			Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Cyanide	Organics	Org -Single	
			max/min		Grease	Day	Day	Report	Report	[0.0516/	[3.324/	[0.9526/	[0.828/	[0.1212/	[2.6772/	[0.3588/	[3.132/	[0.533/	1		Violaudi
				Gal	mg/L	mg/L	mg/L	mg/L	mg/L	0.0516]	2.052)	0.9526)	0.516]	0.1212]	2.6772]	0.3588]		· ·	[2.556/	[1.20/	
uly 17-Dec 17	12/6/2017	Repeat Sampling			Ingra	110412	280	nigr.	nigre	0.0310]	2.032]	0.9320]	0.516	0.1212]	2.0112]	0.3588]	1.776]	0.533]	n/a)	n/a]	
Jan 18-Jun 18		WG	6.69	24.027		400															0
				34,027	ND	120	220		0.10			0.037							0.118	0.062	0
uly 18-Dec 18 Jan 19-Jun 19	2/5/2019,	WG Repeat Sampling	6.81	36,360		200	460 655	2400	0,10	0.005	0.01	0.024	0.01	0.0002	0.025	0.007	0.05	0.005	0.0452	0.017	1
																					2
Jan 19-Jun 19		WG	6.73	20,477	7.7	130	150		0.10			0.061							ND	ND	0
uly 19-Dec 19		WG	6.71	28,429		110	200	1800	0.10	0.005	0.01	0.063	0.01	0.0002	0.025	0.007	0.056	0.005	. ND	ND	0
Jan 20-Jun 20	6/18/2020 9/22/2020.	WG	7.05	14,893		68	_68		0.10			0.044							0.0187	0.012	0
luly 20-Dec 20		WG	6.71	60,745	4.4	170	50	1200	0,20	0.01	0.02	0.031	0.02	0.0002	0.05	0,014	0.1	0,005	0.018	0.0384	0
າ <u>21-Jun 21</u>	6/10/2021	WG	6,58	16,469		170	290		0.10			0.036							0.020	0.0494	0
*****																					
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# **ROCKLAND WWTP EFFLUENT BIOASSAY SAMPLING RESULTS**

[all data are in mg/l]

## **BIOASSAY EFFLUENT SAMPLING DATES**

<u>POLLUTANT</u>	4th Qtr. 20	1st Qtr. 21	2nd Qtr. 21	3rd Qtr. 21
Alamaiaaaa Aa4al	0.000	10.00	0.000	0.000
Aluminum, total	0.039	<0.02	0.009	0.009
Cadmium, total	<0.0003	<0.0003	<0.0001	<0.0001
Calcium, total	71	36	44	27
Chromium, total	<0.001	<0.001		
Copper, total	0.0047	0.0047	0.0081	0.0052
Lead, total	<0.0003	<0.0003	0.0001	0.0001
Magnesium, total	8.2	4.6	5.3	3.4
Nickel, total	0.007	0.002	0.004	0.002
,				
Zinc, total	0.021	0.025	0.022	0.016
Ammonia	0.54	0.41	0.60	0.30
Allimonia	0.54	0.41	0.00	0.30
POTW effluent hardness	200	110	130	82
Page 1	42	40	07	00
Receiving stream hardness	43	40	37	28
POTW effluent alkalinity	57	44	39	32
Paral I I I I I I				
Receiving stream alkalinity	22	15	15	20
(P) = Passed or (F) = Failed	P	Р	Р	F

# ROCKLAND INFLUENT & EFFLUENT COPPER DATA 8-1-20 THROUGH 7-31-21

all data is in ug/L

# MONTHLY AVERAGES

MONTH	INFLUENT	EFFLUENT	PERCENT REMOVAL	PLANT FLOW
Aug-20	78	6.2	92.1	1.5
Sep-20	66	5.3	92.0	1.5
Oct-20	71	5.1	92.8	1.7
Nov-20	47	5.7	87.9	2.2
Dec-20	43	6.6	84.7	3.4
Jan-21	34	4.7	86.2	2.8
Feb-21	44	5.3	88.0	3.3
Mar-21	34	7.0	79.4	2.7
Apr-21	40	5.6	86.0	3.1
May-21	54	6.4	88.1	2.6
Jun-21	45	4.7	89.6	2.4
Jul-21	37	7.6	79.5	3.4
12 MO. AVG	49	5.9	88.2	2.6

# ROCKLAND FLOW AND LOADINGS TRACKING

(Note: Cost Adjustments are based on Moving Averages)

O O			11,000	INF INF	INF FLOW	INF BOD	INF TSS
Migd         LBS         LBS         MGD           1 1.542         2,583         3,845         2.505           1 1.547         3,027         4,170         2.502           1 1.665         3,200         4,417         2.485           2 1.75         3,263         4,000         2.459           3 3.444         2,929         4,128         2.421           2 2.843         2,900         3,237         2.499           2 2.677         2,907         3,256         2.495           2 2.677         2,907         3,256         2.495           3 143         3,485         3,630         2.418           2 2.674         3,485         3,572         2.419           2 2.428         3,874         3,572         2.419	Month/Yr	111071	No.		MOV AVG	MOV AVG	MOV AVG
1.542       2,583       3,845       2.505         1.547       3,027       4,170       2.502         1.665       3,200       4,417       2.485         2.175       3,263       4,000       2.459         3.444       2,929       4,128       2.421         2.843       2,900       3,237       2.431         2.677       2,907       3,256       2.495         2.677       2,907       3,256       2.418         3.143       3,189       3,630       2.418         2.428       3,874       3,572       2.419         2.428       3,874       3,572       2.419		MGD			MGD	LBS	LBS
1.547       3,027       4,170       2.502         1.665       3,200       4,417       2.485         2.175       3,263       4,000       2.459         3.444       2,929       4,128       2.421         2.843       2,900       3,237       2.431         3.307       3,253       4,139       2.495         2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Aug 2020	1.542	2,583	3,845	2.505	3,449	4,876
1.665       3,200       4,417       2.485         2.175       3,263       4,000       2.459         3.444       2,929       4,128       2.421         2.843       2,900       3,237       2.431         3.307       3,253       4,139       2.499         2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Sep 2020	1.547	-3,027	-4,170	2.502	3,429	4,865
2.175       3,263       4,000       7.2459       7.4459         3.444       2,929       4,128       2.421         2.843       2,900       3,237       2.431         3.307       3,253       4,139       2.499         2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Oct 2020	1.665	3,200	4,417	2.485	3,423	4,973
3.444       2,929       4,128       2.421         2.843       2,900       3,237       2.431         3.307       3,253       4,139       2.499         2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         1       2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Nov 2020	2.175	3,263	4,000	2.459	3,377	4,771
2:843       2,900       3,237       2.431         3.307       3,253       4,139       2.499         2:677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         1       2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Dec 2020	3.444	2,929	4,128	2.421	3,166	4,358
3.307       3,253       4,139       2.499         2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         1       2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Jan 2021	2.843	2,900	3,237	2.431	3,124	4,065
2.677       2,907       3,256       2.495         3.143       3,189       3,630       2.418         1       2.614       3,485       3,644       2.380         2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Feb 2021	3.307	3,253	4,139	2.499	3,090	3,933
3.143 3,189 3,630 2.418 2.614 3,485 3,644 2.380 2.428 3,874 3,572 2.419 3.445 2,344 3,371 2.569	Mar 2021	2.677	2,907	3,256	2.495	3,043	3,860
1       2.614       3,485       3,644       2.380         1       2.428       3,874       3,572       2.419         3.445       2,344       3,371       2.569	Apr 2021	3.143	3,189	3,630	2.418	3,031	3,814
1     2.428     3,874     3,572     2.419       3.445     2,344     3,371     2.569	May 2021	2.614	3,485	3,644	2.380	3,064	3,802
3.445 2,344 3,371 2.569	Jun 2021	2.428	3,874	3,572	2.419	3,112	3,790
	Jul 2021	3.445	2,344	3,371	2.569	3,080	3,784